

1 ATRRYYLGA V ELSWDYMQSD LGELPVDARF PPRVPKSFPF NTSVVYKCTL  
 51 FVEFTVHLEN IAKPRPPWMG LLGPTIQAEV YDTVVITLKN MASHPVSLHA  
 101 VGVSYWKASE GA EYDDQTSQ REKEDDKVFP GGSHTYVWQV LKENGPMASD  
 151 PLCLTYSYLS HVDLVKDLNS GLIGALLVCR EGSLAKEKTQ TLHKFILLFA  
 201 VFDEGKSWHS ETKNSLMQDR DAASARAWPK MHTVNGYVNR SLPGLIGCHR  
 251 KSVYWHVIGM GTTPEVHSIF LEGHTFLVRN HRQASLEISP ITFLTAQTLL  
 301 MDLGQFLLFC HISSHQHDGM EAYVKVDSCP EEPQLRMKNN EEAEDYDDDL  
 351 TDSEMDVVRF DDDNSPSFIQ IRSVAKKHPK TWVHYIAAEE EDWDYAPLVL  
 401 APDDRSYKSQ YLNNGPORIG RYKVKVREMA YTDTEFKTRE AIQHESGILG  
 451 PLYGEVGD T LLIIFKNQAS RPYNIYPHGI TDVRPLYSR L PKGVKHLKD  
 501 FPILPGEIFK YKWTVTVEDG PTKSDPRCLT RYSSSEFVNME RDLASGLIGP  
 551 LLICYKESVD QRGNQIMSDK RNVILFSVFD ENRSWYLTEN IQRFLPNPAG  
 601 VQLEDPEFQA SNIMHSINGY VFDSLQLSVC LHEVAYWYIL SIGAQTDFLS  
 651 VFFSGYTFKH K MVYEDTLTL FPFSGETVFM SMENPGLWIL GCHNSDFRNR  
 701 GMTALLKVSS CDKNTGDYEE DSYEDISAYL LSKNNAIEPR SFSQNPPVLK  
 751 RHQREITRTT LQSDQEEIDY DDTISVEMKK EDFDIYDEDE NQSPRSFQKK  
 801 TRHYFIAAVE RLWDYGMSSS PHVLNRNAQS GSVPOFKKV FQEFTDGSFT  
 851 QPLYRGELNE HLGLLGPYIR AEVEDNIMVT FRNQASRPYS FYSSLISYEE  
 901 DQRQGAEP RK NFVKPNETKT YFWKVQHMA PTKDEFDCKA WAYFSDVDLE  
 951 KDVHSGLIGP LLVCHTNTLN PAHGRQVTVQ EFALFFTIFD ETKSWYFTEN  
 1001 MERNCRAPCN IQMEDPTFKE NYRFHAINGY IMDTLPGLVM AQDQIRRWYL  
 1051 LSMGSNENIH SIHFSGHVFT VRKKEEYKMA LYNLYPGVFE TVEMPLPSKAG  
 1101 IWRVECLIGE HLHAGMSTLF LVYSNKCQTP LGMASGHIRD FQITASGQYG  
 1151 QWAPKLARLH YSGSINAWST KEPFSWIKVD LLAPMIHGI KTQGARQKFS  
 1201 SLYISQFIIM YSLDGKKWQT YRGNSTGTLM VFFGNVDSSG IKHNIENPPI  
 1251 IARYIRLHPT HYSIRSTLRM ELMGCDLNSC SMPLGMESKA ISDAQITASS  
 1301 YFTNMFATWS PSKARLHLQG RSNAWRPQVN NPKEWLQVDF QKTMKVTGVT  
 1351 TQGVKSLT S MYVKEFLISS SQDGHQWTLF FQNGKVKV FQ GNQDSFTPVV  
 1401 NSLDPPLLTR YLRIHPQSWV HQIALRMEVL GCEAQDLY

Fig. 1

GGCAATGGAG CGTGAAGAAG GGCCCCAGGG CTGACCCCGG CAAACGTGAC (50)  
CCGGGGCTCC GGGGTGACCC AGGCAAGCGT GGCCAAGGGG CCCGTGGGTG (100)  
ACACAGGCAA CCCTGACAAA GGCCCCCAG GAAAGACCCC CGGGGGGCAT (150)  
CGGGGGGGTG TTGGCGGGTC ATGGGGGGGG CGGGTCATGC CGCGCATTC (200)  
TGGAAAAAGT GGAGGGGGCG TGGCCTTCCC CCCGCGGCC CCTAGCCCC (250)  
CCGCAGAGAG CGGCGCAACG GCGGGCGAGC GCGGGGGGT CGGGGTCCGC (300)  
GGGCTCCGGG GGCTGCGGGC GGTGGATGGC GGCTGGCGTT CCGGGGATCG (350)  
GGGGGGGGTC GGGGGGCGCT GCGCGGGCGC AGCCATGCGT GACCGTGATG (400)  
AG (402)

Fig.\_2

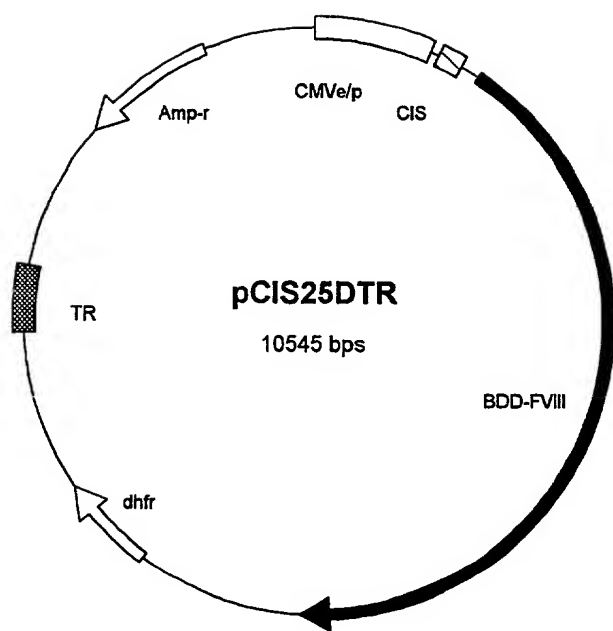


Fig.\_3

Fig.\_4A

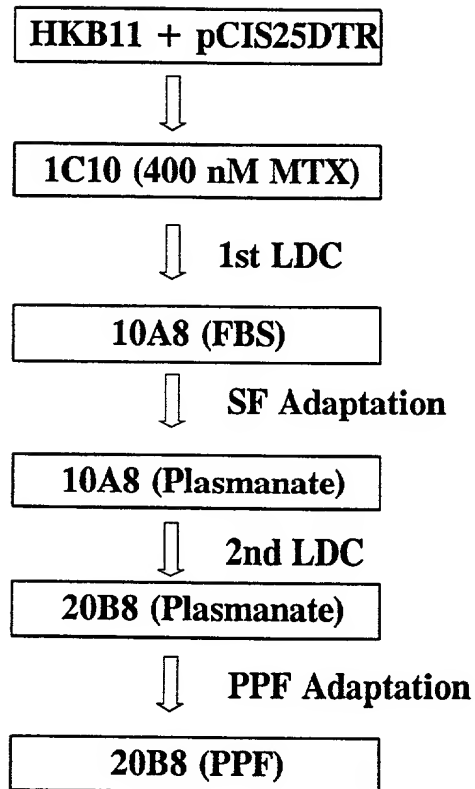
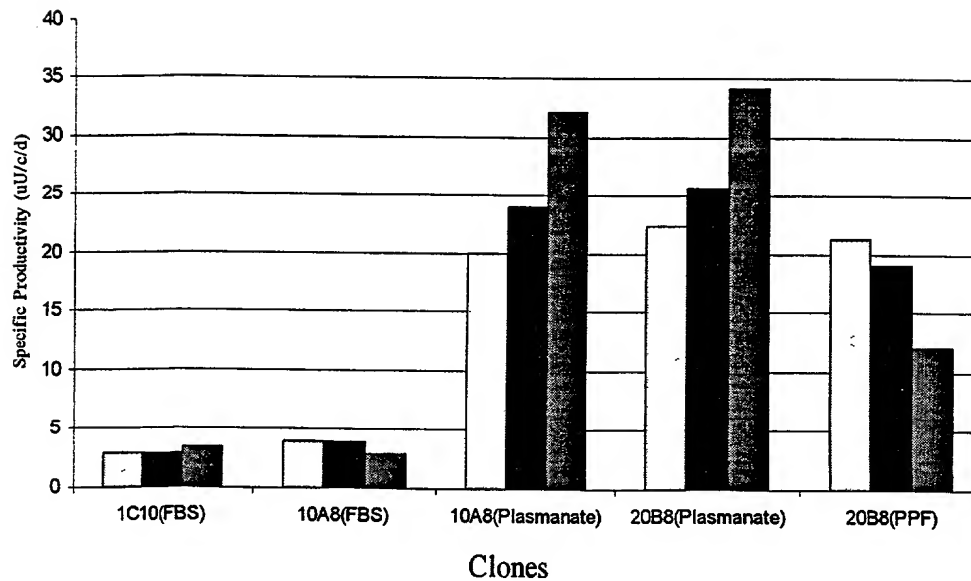


Fig.\_4B



Volumetric Productivity of HKB cells

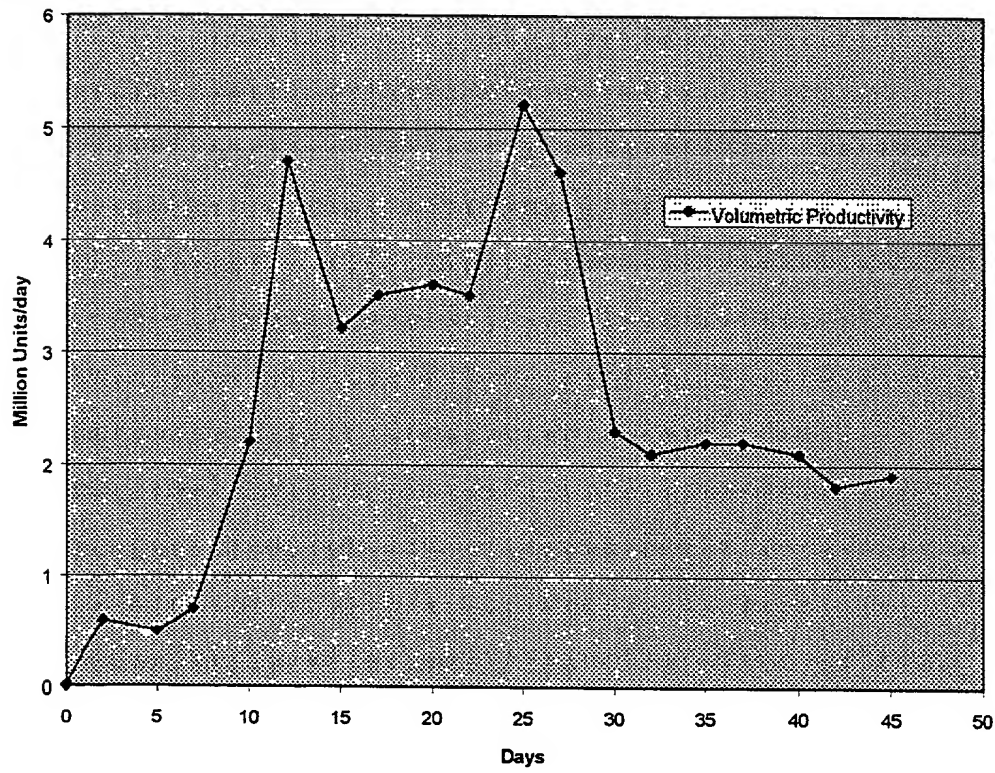


Fig.\_5